

CLAIMS

What is Claimed is:

1-11. (Canceled)

12. (Original) A method for forming group III-N based articles, comprising the steps of:
providing a single crystal silicon substrate;
depositing a single crystal zinc oxide (ZnO) layer on said substrate, and
depositing a single crystal group III-N layer on said ZnO layer, wherein at least a portion
of said step of depositing group III-N layer is performed at a temperature of less than 600° C.

13. (Original) The method of claim 12, wherein said step of depositing said group III-N
layer comprises depositing a seed layer at a temperature of no more than 600° C, followed by a
step of depositing another portion of said group III-N layer at a temperature of more than 600° C.

14. (Original) The method of claim 12, further comprising the step of treating said ZnO layer
with a gallium comprising gas before said step of depositing said group III-N layer.

15. (Original) The method of claim 14, wherein said gallium comprising gas comprises
triethyl gallium.

16. (Original) The method of claim 12, wherein said group III-N layer comprises GaN.

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17. (Original) The method of claim 12, wherein said group III-N layer is an epitaxial layer.
18. (Original) The method of claim 12, wherein a thickness of said ZnO layer is less than 200 angstroms.
19. (Original) The method of claim 12, wherein said step of depositing a zinc oxide (ZnO) layer comprises pulsed laser deposition.